

上图所示,光控板材对可见光的透过率明显高于普通板材,而对红外线的透过率,却远远低 于没有此功能的板材。在光照的高峰时段,采用光控板材的环境室内温度,比起普通板材, 至多可以低 10℃ 的温差,环境改善功能非常明显!

As showed from the above graph, solar control sheet transmitted more visible lights but much less infrared rays than normal PC sheets. During the peak time of sunshine, the indoor temperature difference between using solar-control and normal PC sheets could reach 10°C.













抗紫外线

Solar-Control UV Protection



节能环保





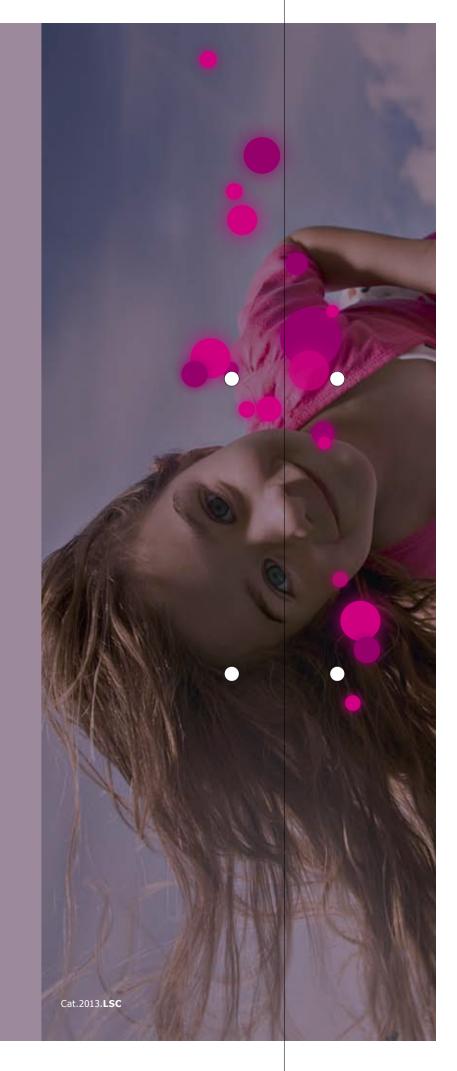
Energy-saving Light & Durability Beauty Appearance 轻质耐久





光控板

Solar-control Sheets



Permanent Excellent Quality Just Need Time to Prove

光控板

Solar-control Sheets

光控板材在热能管理方面采用了专用的树脂改性技术 (近红外阻隔和 金属反射),使其在保证可见光大量透过的同时,有效阻挡红外热能,明显降 低用于建筑降温和照明的能耗费用,营造更舒适的室内环境。

solar-control sheet applies resin-modified technology thermal management. It can effectively block the infrared heat while let in the visible light, significantly reducing the building energy billing.



产品特点

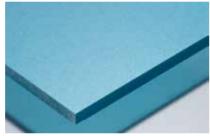
- 促进舒适节能 有效利用自然光
- 完全阻隔紫外线 减少温室效应 • 外观性能选择多样
- 历新所有板材均可附加该功能

Product Features

- Promotes energetic efficiency and well being
- Better use of natural lighting
- Block 100% UV
 Reduces greenhouse effect
- Different properties and appearances
- Applicable to all Lixin polycarbonate produ

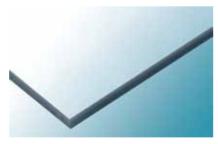
● 光控板与普通板效果对比

Comparison between Solar-control and normal sheets



▼ 新光控板表面有特殊性能细小颗粒,能有效反射阳 光中的红外线,达到隔热保温的效果。

Lixin Solar-control sheet has a frosted surface which reflects most infrared rays of the sunshine, preventing



▼ 普通板表面无特殊颗粒,不能选择性屏蔽阳光中得 导致温度升高的红外线。

Other normal sheet has no modified resin on the surface. It can't selectively block the infrared rays in

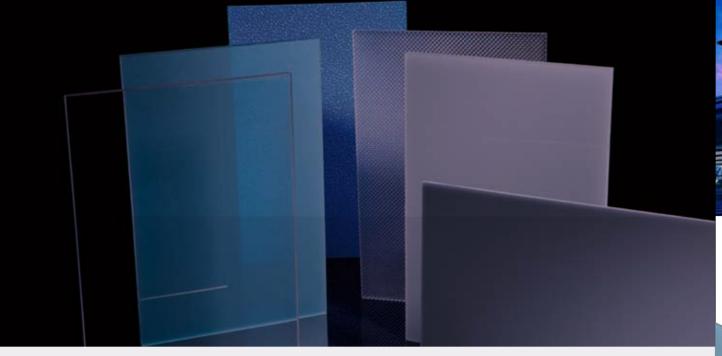
典型应用

- 室内居住空间
- 建筑屋面采光 • 泳池顶盖
- 体育场馆

• 走廊顶棚

Typical Applications

- Sport venues Swimming pool covers
- Covered walkways and canopies



光控技术, 营造令人愉悦的舒适环境!

To Create A Pleasant Comfortable Environment!

在常规板材的基础上加入了特殊的红外控制材料,使得板材在保持原有基本性 能基础上,能够在炎热的夏季对太阳光中的热能进行大幅度的反射,在寒冷的冬季对室内空调 热源更有效的避免流失,达到良好的隔热保温效果,营造更舒适的环境。

With special resin-modified technology, solar-control sheet can reflect most of the external sunshine heat in summer and preserve most of the indoor air-conditioning heat in winter. Its outstanding thermal insulation performance helps create a pleasant environment.

标准参数和典型性能 以金属反射灰色为参考

Production Standards & Technical Features based on metallic reflect gray sheet

性能 Features	方法 Test Code	条件 Test Condition	单位 Unit	数值Data
密度 Density	(D-1505)		g/cm³	1.2
热变形温度 Distortion Temperature	(D-648)		°C	130
服务温度范围 - 长期 Continuous Working Temperature		Load:1.82MP	°C	-50 to +100
服务温度范围 - 短期 Temporary Working Temperature			°C	-50 to +120
线性热膨胀系数 Linear thermal Expansion	(D-696)		10 ⁻⁵ /°C	6.5
屈服拉伸强度 Tensile Strength	(D-638)	10 mm / min	Мра	62
断裂延伸率 Elongation at Break	(D-1505)	10 mm / min	%	>80
落锤冲击 Drop Impact	(ISO 6603/1)			4-400
热膨胀 / 收缩范围经验值 Empirical Expansion/Contraction Value			mm/m	3
透光率 Light Transmission			%	可调 Adjustable
太阳能透过率 Solar Transmittance			%	14-34
传热系数 U-value			W/m²·C	1.5-3.3
倒角 Chamfer Angle	(DIN 52305)	3 mm	Bg	<5
折射能力 Refractive Power	(DIN 52305)		dpt	<0.1
隔声数值 Acoustic Insulation			db	19-23
绝缘强度 Insulation Strength	(DIN EN 60243)		kv/mm	>30



一个优秀的建筑,对温度、光线、噪声等各方面体验均有很高的要求。历 新光控板可有效隔绝近红外热能,但允许可见光大量通过,将建筑采光和隔热 性能有机结合起来,可减少40%左右的制冷和照明费用。由于采用了UNION五 层共挤的红外线吸收技术,历新光控板具有与板材实际寿命相同的热能控制性 能。它加工方便,具有极高的设计自由度,既可以实现建筑师理想的双曲面弧 形安装效果,用于声屏障、采光天窗、体育场馆、机场及大型建筑采光,又可 被热成型加工成各种几何形状,而不会影响隔热耐候性能。

A good building sets high requirements on temperature, light and noise management. Lixin solar-control sheets can effectively block IR heat while let in the visible light, which could save up to 40% lighting and cooling cost. Thanks to Union 5-layer co-extrusion technology, the heat management becomes an inherent function of Lixin solar-control sheet. It can not only be flexibly curveinstalled as sound-barriers and roof glazing, but also be thermoformed into different shapes to meet specific requirements of customers.







